3.2 Adaptors

- (1) Any adaptor that is designed for household use at a voltage of not less than 200 volts a.c. single phase is classified as a prescribed product. In addition to the essential safety requirements, the adaptor has to comply with the corresponding specific safety requirements of the Regulation.
- (2) Any adaptor which incorporates electrical equipment other than a fuse-link, switch or indicator light is not classified as a prescribed product and yet will have to comply with the essential safety requirements of the Regulation.
- (3) The Regulation does not apply to travel adaptor, that is to say, an adaptor which is not designed to engage with a mains socket in Hong Kong but enables a plug to be connected to a mains socket of places outside of Hong Kong.

(4) Specific safety requirements

(A) <u>Designs of adaptors</u>

(I) <u>5A 3-round-pin adaptor</u>

5A adaptors should be designed and manufactured to BS 546 despite the following:

- (a) A 5A adaptor protected by fuse-link conforming to BS 1362 and with a rated current not exceeding 5A is permitted (other than fuse-link to BS 646 as specified in BS 546); and
- (b) A 5A adaptor with not more than three 5A sockets protected by one 5A main fuse-link conforming to BS 646 or BS 1362 is permitted.

(II) <u>13A 3-rectangular-pin adaptor</u>

- (a) 13A adaptors should be designed and manufactured to BS 1363 Part 3.
- (b) A 13A adaptor having one or two sockets for 13A plugs conforming to BS 1363 Part 1 need not be fused.
- (c) A multiway 13A adaptor having more than two sockets for 13A plug conforming to BS 1363 Part 1 should be protected by a 13A fuse-link conforming to BS 1362.
- (d) A multiway 13A adaptor having one socket for a 13A plug conforming to BS 1363 Part 1, and one or more 5A sockets for plugs conforming to BS 546 should be provided with an appropriate fuse-link complying with

BS 646 or BS 1362 to protect the outgoing circuits through the 5A sockets. The socket for the BS 1363 Part 1 plug need not be fused.

- (e) A 13A adaptor having 5A sockets for plugs conforming to BS 546 should be provided with an appropriate fuse-link conforming to BS 646 or BS 1362 to protect the outgoing circuit or circuits.
- (f) A 13A adaptor having 15A adaptor sockets is not allowed.

(III) 15A 3-round-pin adaptor

15A adaptors should be designed and manufactured to BS 546 despite the following :

- (a) a 15A adaptor protected by fuse-link conforming to BS 1362 is permitted (other than fuse-link to BS 646 as specified in BS 546);
- (b) The configurations (number and the current ratings of sockets) of 15A adaptors as shown in Table 6 are permitted.

TABLE 6 NUMBER AND CURRENT RATING OF SOCKETS

Number and current rating of sockets						
Non-fused socket		Sockets each with separate fuse of rating not greater than 5A		Sockets with one common 5A fuse		
Number	Current rating (A)	Number	Current rating (A)	Number	Current rating (A)	
One	15	One	5	-	-	
One	15	-	-	Two	5	
One	13	One	5	-	-	
One	13	-	-	Two	5	
-	-	Three	5	-	-	
-	-	-	-	Not more than three	5	

(B) <u>Marking and labelling</u>

(I) The total maximum loading of the adaptor (other than shaver adaptor) in amperes has to be marked on the external accessible surface. Examples of suitable marking are as follows:

" TOTAL LOADING MUST NOT EXCEED 5A " " MAX 13A "

- (II) Shaver adaptors conforming to BS 1363 Part 3 should be marked on the accessible external surface with appropriate words, e.g. 'SHAVERS ONLY'. Shaver adaptors should be marked on the engagement surface with appropriate words to indicate that the adaptor should be fitted with a 1A rated fuse complying with BS 646.
- (III) All adaptors should be clearly and indelibly marked with the standard to which they conform (i.e. BS 546, BS 1363/3).
- (IV) For fused adaptors, the word "FUSED" or "FUSE" or equivalent symbol " ______ " together with the rating and standard (i.e. BS 646, BS 1362) for the fuse-link should be marked on the external accessible surface.
- (V) When a fuse-link is provided within the body of the adaptor, it should be mounted in appropriate contacts only between the line plug pin and the corresponding line socket contact(s) in such a way that it cannot be displaced when the adaptor is in use. The design should be such that the fuse-link cannot be left in inadequate contact when the fuse cover or fuse carrier is replaced and firmly secured in position. It should not be possible to replace the fuse-link in an adaptor unless the adaptor is completely withdrawn from the socket-outlet.

(C) <u>Clearance</u>

For adaptor to BS 546, unless the external portions of the current-carrying parts of pins adjacent to a socket-outlet adaptor base are insulated with sleeves of the minimum length given in Table 7, no part of them should be less than the minimum distance given in Table 7 from the periphery of the socket-outlet adaptor base.

TABLE 7 LENGTHS AND DISTANCES

Current rating	Minimum length of sleeves	Minimum distance of pins from periphery of adaptor base
amp.	mm	mm
5	6.35	7.93
15	7.93	9.52

(D) <u>Safety shutters</u>

The construction of the adaptor should be such that when a plug is withdrawn from it, the current-carrying socket contacts are automatically screened by shutters. The shutters should be operated by the insertion of the earthing pin. One socket aperture shutter should not be capable of closing independently of the other aperture shutter.

(E) Socket of the adaptor

- (I) Each socket of the adaptor should be designed to accommodate only one type of plug, i.e. either 5A, 13A or 15A.
- (II) A 5A socket should be designed and constructed to BS 546 and matched with the dimensions of a 5A 3-round-pin plug.
- (III) A 13A socket should be designed and constructed to BS 1363 Part 2 and matched with the dimensions of a 13A 3 rectangular-pin plug to BS 1363 Part 1.
- (IV) A 15A socket should be designed and constructed to BS 546 and matched with the dimensions of a 15A 3-round-pin plug.